

Application Serial No. 10/726,394  
Response to Office Action Mailed July 24, 2007

**Amendments to the Specification:**

In the specification, please make the following amendments/replacements. Page and line citations are to the international application as originally filed.

**On page 1:**

This invention was made with government support under Contract Number MDA972-02-1-0010, awarded by DARPA-DSO, and under Contract Number {[#####]} DE-FG0201ER15183, awarded by DoE, Office of Basic Energy Sciences. The Government has certain rights in the invention.

**At the bottom of page 7, lines 17-22:**

Silica synthesis sources were HiSil® 915 from Pittsburgh Plate Glass (PPG), and tetramethylammonium silicate (10 wt % silica, SACHEM Inc.). HiSil® silicas are synthetic precipitated silica thixotropes used in a variety of coatings, sealants, and adhesive systems as rheology modifiers and antisag/suspension aids. The Co source was CoSO<sub>4</sub>xH<sub>2</sub>O (Aldrich Chemical Co.). The quaternary ammonium surfactants C<sub>n</sub>H<sub>2n+1</sub>(CH<sub>3</sub>)<sub>3</sub>NBr with n=12, 14, 16 and 18 were obtained from Aldrich Chemical Co., and with n=10 from American Tokyo Kasei. The surfactant solutions were prepared by ion-exchanging the 29 wt % (C10 and C12), 20 wt % (C14 and C16), and 10 wt % (C18) of C<sub>n</sub>H<sub>2n+1</sub>(CH<sub>3</sub>)<sub>3</sub>NBr aqueous solution with equal molar

**At the top page 9, lines 1-6:**

surfactant: Co:H<sub>2</sub>O=1:0.27:0.01:X (X=74.4-86). Because the preparation process may cause some loss of Co and silica in the by-products, the final Co content of each sample was determined by ICP. A pure siliceous MCM-41 (without the addition of the metal salt to the

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synthesis solution) was also prepared with the same procedure as used for Co-MCM-41. Other suitable sources providing a supply of silicon are, for example, a colloidal silicon solution and Cab-O-Sil® L-90, (Cabot Corp., Boston MA). Cab-O-Sil® silicas are fumed silica used in a variety of sealants and adhesive systems as rheology modifiers and antisag/flow/reinforcement agents.